

AMENDMENTS TO THE CLAIMS

1. (Cancelled)

2. (Currently amended) ~~The recording condition determining method as claimed in claim 1~~ A recording condition determining method realized in an information recording apparatus that records information on an information recording medium using an optical beam emitted from a light source, the method comprising:

a first step of determining whether an optimal recording power of the light source is greater than a preset threshold value based on at least one of a result of test writing on the information recording medium and a result of receiving reflected light from the information recording medium during recording;

a second step of selecting according to a predetermined selection criterion at least one of a plurality of choices including a choice of not changing the optimum recording power, said second step being realized when it is determined in the first step that the optimum recording power exceeds the threshold value; and

a third step of establishing a recording condition based on the selected choice, wherein the selection criterion corresponds to a criterion of selecting the choice of not changing the optimum recording power if an estimation of an influence on a service life of the light source does not exceed a predetermined level.

3. (Original) The recording condition determining method as claimed in claim 2, wherein the influence on the service life of the light source is estimated based on at least one of an amount of data to be recorded, an amount of time required for recording, and hysteresis information pertaining to recording power and recording time of a past recording.

4 – 9 (Cancelled)

10. (Currently amended) ~~The recording condition determining method as claimed in claim 1, further comprising:~~ A recording condition determining method realized in an information recording apparatus that records information on an information recording medium using an optical beam emitted from a light source, the method comprising:

a first step of determining whether an optimal recording power of the light source is greater than a preset threshold value based on at least one of a result of test writing on the information recording medium and a result of receiving reflected light from the information recording medium during recording;

a second step of selecting according to a predetermined selection criterion at least one of a plurality of choices including a choice of not changing the optimum recording power, said second step being realized when it is determined in the first step that the optimum recording power exceeds the threshold value;

a third step of establishing a recording condition based on the selected choice; and

a fourth step of storing hysteresis information including the optimum recording power and a light emission time of the light source at said optimum recording power, said fourth step being performed when the choice of not changing the optimum recording power is selected according to the selection criterion in the second step.

11. (Cancelled)

12. (Currently amended) ~~The program as claimed in claim 11,~~ A program implemented in an information recording apparatus that is adapted to record information on an information recording medium using an optical beam emitted from a light source, said program running on a control unit of the information recording apparatus to execute:

a first procedure of determining whether an optimal recording power of the light source exceeds a preset threshold value based on at least one of a result of test writing on the information

recording medium and a result of receiving reflected light from the information recording medium during recording;

a second procedure of selecting according to a predetermined selection criterion at least one of a plurality of choices including a choice of not changing the optimum recording power, said second procedure being realized when it is determined in the first procedure that the optimum recording power exceeds the threshold value; and

a third procedure of establishing a recording condition based on the selected choice,

wherein the selection criterion corresponds to a criterion of selecting the choice of not changing the optimum recording power if an estimation of an influence on a service life of the light source does not exceed a predetermined level.

13 – 14 (Cancelled)

15. (Currently amended) ~~The information recording apparatus as claimed in claim 14, further comprising:~~ An information recording apparatus that is adapted to record information on an information recording medium using an optical beam emitted from a light source, said apparatus comprising:

recording power obtaining means for obtaining an optimal recording power of the light source based on at least one of a result of test writing on the information recording medium and a result of receiving reflected light from the information recording medium while recording information;

determination means for determining whether the optimum recording power exceeds a preset threshold value;

selection means for selecting according to a predetermined selection criterion at least one of a plurality of choices including a choice of not changing the optimal recording power, said selection means being realized when it is determined by the determination means that the optimal recording power exceeds the threshold value;

establishing means for establishing a recording condition based on the selected choice;

first storage means in which hysteresis information pertaining to the light source is stored;
and

storing means for storing in the first storage means hysteresis information including the optimal recording power and a light emission time of the light source at said optimal recording power, said storing means being realized when the choice of not changing the optimal recording power is selected by the selection means.

16. (Currently amended) ~~The information recording apparatus as claimed in claim 14, further comprising:~~ An information recording apparatus that is adapted to record information on an information recording medium using an optical beam emitted from a light source, said apparatus comprising:

recording power obtaining means for obtaining an optimal recording power of the light source based on at least one of a result of test writing on the information recording medium and a result of receiving reflected light from the information recording medium while recording information;

determination means for determining whether the optimum recording power exceeds a preset threshold value;

selection means for selecting according to a predetermined selection criterion at least one of a plurality of choices including a choice of not changing the optimal recording power, said selection means being realized when it is determined by the determination means that the optimal recording power exceeds the threshold value;

establishing means for establishing a recording condition based on the selected choice;

type information obtaining means for obtaining type information of the information recording medium; and

second storage means storing information on at least one type of information recording medium of which a power margin extends over a predetermined value in the vicinity of the threshold value; wherein

the choices further include a choice of changing the optimal recording power to the predetermined value in the vicinity of the threshold value; and

the selection means is arranged to select the choice of changing the optimal recording power to the predetermined value in the vicinity of the threshold value when the type information of the information recording medium obtained by the type information obtaining means corresponds to a type of information recording medium stored in the second storage means.

17 – 18 (Cancelled)

19. (Currently amended) ~~The information recording system as claimed in claim 18,~~
~~wherein:~~ An information recording system for recording information on an information recording medium, comprising:

an information recording apparatus that is adapted to record information on the information recording medium using an optical beam emitted from a light source, said apparatus including:

recording power obtaining means for obtaining an optimal recording power of the light source based on at least one of a result of test writing on the information recording medium and a result of receiving reflected light from the information recording medium while recording information;

determination means for determining whether the optimum recording power exceeds a preset threshold value;

selection means for selecting according to a predetermined selection criterion at least one of a plurality of choices including a choice of not changing the optimal recording power, said selection means being realized when it is determined by the determination means that the optimal recording power exceeds the threshold value; and

establishing means for establishing a recording condition based on the selected choice; said system further comprising:

an information processing apparatus that is adapted to control said information recording apparatus, wherein

the information processing apparatus includes a display unit that is adapted to display the choices including the choice of not changing the optimal recording power when the optimal recording power exceeds the threshold value, an input unit for selecting at least one of the choices

Application No. 10/728,795
Amendment dated November 8, 2007
After Final Office Action of August 8, 2007

Docket No.: R2184.0284/P284

displayed by the display unit, and a notification unit for notifying the information recording apparatus of the choice selected at the input unit.